

BEFORE THE DEPARTMENT OF NATURAL RESOURCES  
ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

CONSENT ORDER  
NO. 90-AQ-10

Archer-Daniels Midland Co.

TO: Archer-Daniels-Midland Company  
1251 Beaver Channel Parkway  
Clinton, IA 52732

I. SUMMARY

The consent order is entered into by the Archer-Daniels Midland Company (hereinafter "ADM") and the Department of Natural Resources (hereinafter the "Department"). The Department withdraws in its entirety, Administrative Order No. 86-AQ-09 issued to ADM on May 12, 1986. This consent order pertains to the reduction of sulfur dioxide (SO<sub>2</sub>) emissions from ADM's facility located in Clinton, Iowa, to a level at which the National Ambient Air Quality Standards (NAAQS) will not be exceeded.

II. JURISDICTION

This order is issued pursuant to Iowa Code section 455B.134(9) and 455B.138(1) which authorize the director to issue any order necessary to prevent, abate or control air pollution.

III. STATEMENT OF FACTS

1. Archer-Daniels-Midland Company (hereinafter "ADM") is engaged in the business of producing agricultural commodities including corn derivatives. ADM has an office located on Beaver Channel Parkway in Clinton, Iowa 52732. It is a Delaware Corporation qualified to do business in Iowa and its registered agent is C.T. Corporation Systems.

2. The Clinton area, in which the subject ADM plant is located, has been declared by the Environmental Protection Agency to be one of a list of unclassified areas for particulate matter and as an attainment area for sulfur dioxide (SO<sub>2</sub>).

3. The ADM facility consists of approximately one hundred buildings and constitutes a "major source" as is defined by Iowa Code section 455B.131(8). Included at the facility are 9 boilers, Boilers #1-9. Boilers, #1, #2, #8 and #9 are currently natural gas/oil fired. Boilers #3 through #7 are coal fired. Boilers #6 and #7 are fitted with continuous opacity monitors. In addition, the facility consists of a number of dryers.

4. The Department alleges that it has documented the existence of 125 air contaminant sources at the facility as defined by Iowa Code section 455B.131(2) and stationary sources as defined by rule 567--20.2 (455B) Iowa Administrative Code (IAC).

5. The Department alleges that it has installed two ambient air quality monitors in the Clinton area in proximity to the ADM facility. These are located in the parking lot and tennis court areas of Chancey Park. The parking lot monitor was installed in April, 1985. The tennis court monitor has been in place since June, 1987.

6. The Department alleges that it has monitored twenty-three exceedances of the primary SO<sub>2</sub> ambient air quality standard and two SO<sub>2</sub> alert levels at the parking lot monitor since April, 1985. The Department alleges that it has monitored eleven primary SO<sub>2</sub> ambient air quality standard exceedances and one SO<sub>2</sub> alert level at the tennis court monitor since November 16, 1987.

7. The Department alleges that it has determined, based upon modeling and the monitoring data, that the SO<sub>2</sub> emissions from the ADM facility are a contributing source of the SO<sub>2</sub>, which caused the SO<sub>2</sub> exceedances and alert levels described in paragraph 6 above.

8. In addition, the Department alleges that it determined that the currently allowed SO<sub>2</sub> emissions from the ADM facility will not assure the attainment and maintenance of the SO<sub>2</sub> ambient air quality standard in the area of the facility.

#### IV. CONCLUSIONS OF LAW

1. The Clinton area, in which ADM is located, has been designated as an attainment area for SO<sub>2</sub>.

2. The boilers, dryers and other equipment operated by ADM are "air contaminant sources" as defined by Iowa Code section 455B.131(2) and "stationary sources" as defined by rule 567--20.2 (455B) Iowa Administrative Code (IAC).

3. Pursuant to rule 567--28.1 (455B), the state of Iowa ambient air quality standards are the National Primary and Secondary Ambient Air Quality Standards (NAAQS), 40 C.F.R. Part 50 as amended through July 1, 1987.

4. An exceedance of the primary or secondary NAAQS for SO<sub>2</sub> constitutes "air pollution" as defined by Iowa Code section 455B.131(3).

5. In accordance with Iowa Code section 455B.134(9), the director shall issue orders consistent with the rules to cause the abatement or control of air pollution.

6. The director has considered the facts and circumstances bearing upon the reasonableness of ADM's SO<sub>2</sub> emissions including the character and degree of injury to, or interference with, the protection of health and the physical property of the public and the practicability of reducing or limiting those SO<sub>2</sub> emissions.

7. Based upon these facts and circumstances, the director has determined that the reduction of these SO<sub>2</sub> emissions to a level at which the SO<sub>2</sub> NAAQS will not be exceeded is practicable.

8. Paragraph 567--22.1(1)"b" and subrule 567--22.1(3)(IAC) provides that the owner or operator of a modified stationary source shall obtain a permit to install or alter equipment or control equipment. The Department asserts that the modifications of the boilers, dryers and other equipment described above including the agreed upon emission reductions are subject to the Department's permitting requirements.

#### V. ORDER

THEREFORE, the Department ORDERS AND ADM AGREES to do the following:

#### BOILER EMISSIONS

1. ADM shall immediately limit boiler emissions to not exceed the standards set forth in applicable permits and incorporated herein as Table 1 below except that Boilers #1 and #2 shall not be used to combust coal until after emissions from these boilers are relocated to emit from the new stack described in paragraph 3 below.

Table 1. Emission limits for boilers at ADM's, Clinton, Iowa facility.

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<u>BOILER #</u>	<u>EMISSION LIMIT (lb/mmBTU)*</u>	
	Permit No.	
1	2.00	85-A-048-S90
2	2.00	85-A-048-S90
3	2.00	85-A-048-S90
4	2.00	82-A-095-S90
5	2.00	82-A-095-S90
6	3.00	72-A-111-S90
7	3.00	72-A-112-S90

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90-A-067  
86-A-031-S90

- \* Maximum emissions to be determined by means of a 24 hour rolling average of continuous emission monitoring results.
- \*\* Boilers 8 and 9 shall only be operated on natural gas unless and until ADM provides a demonstration assuring continued maintenance of the ambient air quality standard while firing these boilers with fuel oil.

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2. Immediately upon completion of upgrading and duct construction of each boiler, as described in paragraph 3 below, ADM shall cease emissions from the existing stack for that boiler.

3. ADM shall construct a new stack not less than 300 feet in height located approximately at UTM coordinate 731,706 meters easterly by 4,633,416 meters northerly and shall relocate all emissions from Boilers #1 through #7 to this stack pursuant to the following schedule:

<u>ITEM</u>	<u>TO BE COMPLETED NO LATER THAN:</u>
Submit final design drawings	Sept. 1, 1990
Start stack construction	Nov. 1, 1990
Complete stack construction	May 1, 1991
Start boiler upgrade and duct construction	May 1, 1991
Complete boiler upgrade and duct construction	July 1, 1991
Submit report demonstrating compliance with emission limits	Sept. 1, 1991

During this construction period, ADM shall report the status of construction to DNR in writing by the 1st of each month.

4. ADM shall install and operate a continuous emission monitor to measure emissions from Boilers #6 and #7. ADM shall install and operate a continuous emission monitor to measure emissions from Boilers #1 through #5 prior to any commingling of emissions from these boilers with emissions from Boiler #6 or Boiler #7. These continuous emission monitors shall be installed and operated as specified in the appropriate permits. Installation shall be completed pursuant to the following schedule:

<u>ITEM</u>	<u>DATE</u>
Complete equipment installation	July 1, 1991
Submit certification Report	Sept. 1, 1991

3. ADM shall immediately limit emissions from non-traditional sources of sulfur dioxide in accordance with Tables 2 and 3 and with applicable permits which are incorporated herein in their entirety. ADM shall immediately limit sulfur dioxide emissions from all other sources so as not to exceed 0.0 pounds per hour.

Table 2. Emission limits for monitored non-traditional SO<sub>2</sub> sources at ADM, Clinton.

Number	Source Description	Emission Limit (lb/hr)	Permit No.
9	Sulphur Tower	12.0	90-A-078
25	#1 Intensa	8.0	74-A-044-S90
65	#2 Intensa	8.0	75-A-182-S90
66	#3 Intensa	8.0	75-A-183-S90
67	#4 Intensa	8.0	85-A-072-S90
68	#5 Intensa	8.0	85-A-073-S90
69	#6 Intensa	8.0	85-A-074-S90
45	Vetter Dryer	1.5	81-A-048-S90
46	Vetter Dryer	1.5	81-A-049-S90
47	Vetter Dryer	1.5	81-A-050-S90
48	Vetter Dryer	1.5	81-A-051-S90
49	Vetter Dryer	1.5	81-A-052-S90
51	No. 1 and No. 2 Leader Germ Dryer Rotoclone	3.0	90-A-079
52	No. 3 Leader Germ Dryer Rotoclone Exhaust	3.0	73-A-181
53	No. 4 Leader Germ Dryer Rotoclone Exhaust	3.0	73-A-182
58A	#1 Fluid Bed Germ Dryer	8.0	90-A-082
58B	#1 Stearn-Rogers	8.0	90-A-083

Table 3. Emission limits for non-traditional SO<sub>2</sub> sources without special emission monitoring requirements.

Source Number	Bldg No.	Description	UTM X (m)	Coordinate Y (m)	EXH Height (m)	Diam (m)	Emission Limit (lb/hr)	Permit No.
7		Wet Milling						90-A-068
10		Corn Surge Tnk Vn	731480	4633270	23.8	0.51	0.2	

11	2nd Flr Exh Vent	731520	4633250	25.3	0.91	0.005
12	3rd Flr Exh Fans	731501	4633260	10.4	0.91	0.1
13	3rd Flr Exh Fans	731497	4633260	10.4	0.91	0.1
14	2nd Grind Tnk Vnt	731473	4633270	6.7	0.91	0.008 —
15	1st Fiber Wsh Tnk	731497	4633260	8.2	0.36	0.85
16	1st Fiber Wsh Tnk	731493	4633270	9.1	0.41	0.009
17	2nd Flr Exhaust	731497	4633260	6.4	1.22	0.006
18	2nd Flr Exh Vent	731500	4633250	6.4	0.91	0.005

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9 Starch Separations

90-A-069

19	Roof Vents	731513	4633270	25.9	1.22	0.00625
20	"	731521	4633280	25.9	1.22	"
21	"	731525	4633280	25.9	1.22	"
22	"	731517	4633270	25.9	1.22	"
23	"	731518	4633270	25.9	1.22	"
24	"	731524	4633270	25.9	1.22	"
25	"	731528	4633280	25.9	1.22	"
26	"	731535	4633290	25.9	1.22	"

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10 Steep House

90-A-070

27	Roof Vents	731525	4633300	23.5	0.91	0.0142
28	"	731540	4633320	23.5	0.91	"
29	"	731556	4633330	23.5	0.91	"
30	"	731523	4633290	23.5	0.91	"
31	"	731537	4633310	23.5	0.91	"
32	"	731553	4633320	23.5	0.91	"

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14 Feed Manufacturing

90-A-071

36	Roof Vent Fans	731568	4633340	19.5	0.46	0.007
37	Fiber Spinners	731587	4633350	13.4	0.25	0.012

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92 Gluten Filters

90-A-072

41	Roof Vent Fans	731557	4633370	14.9	0.91	0.012
42	"	731560	4633370	14.9	0.91	0.012
43	"	731564	4633380	14.0	0.61	0.008
44	"	731567	4633380	14.0	0.61	"
45	"	731571	4633390	14.0	0.61	"
46	"	731573	4633380	14.0	0.61	"
47	"	731578	4633390	14.0	0.61	"
48	"	731580	4633390	14.0	0.61	"
49	Wall Vent	731568	4633390	14.0	0.46	0.003
50	Wall Fan	731555	4633380	4.3	0.76	0.012

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81 Gluten Filters

90-A-073

51	Roof Vent Fans	731585	4633400	14.3	0.46	0.006
52	"	731586	4633370	14.3	0.46	0.006
53	Wall Vent Fan	731587	4633390	4.3	0.46	0.006
54	"	731582	4633400	4.3	0.46	0.006

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55	Vac Pump Exhaust	731588	4633400	8.5	0.15	0.007
56	"	731593	4633410	8.5	0.15	"
57	"	731594	4633410	8.5	0.15	"
58	"	731596	4633410	8.5	0.15	"
59	"	731598	4633410	7.3	0.15	"
60	"	731600	4633410	7.3	0.15	"

66	73 MR#1 Vapor Vent	731925	4633580	20.1	0.15	0.85	90-A-075
67	78 MR Evaporator	731892	4633520	22.0	0.15	0.85	90-A-076
70	98 Rotoclone Scrub Leader Dryer (3rd Pass)	731716	4633284	11.3	0.38	0.467	90-A-077
71	Rotoclone Scrub Leader Dryer (3rd Pass)	731716	4633284	11.3	0.38	0.467	

6. ADM shall demonstrate compliance with the permit emission limits for the sources specified in Table 2 by means of stack tests as provided in paragraph 7 and 8 below.

7. Stack test shall be performed in conformance with the Air Quality Compliance Sampling Manual within 120 days of the effective date of this order and every 15 months thereafter for the next five years for a total of five tests for each emission point listed in paragraph 6. ADM shall submit stack test reports within 60 days of each test.

8. With Department approval, stack tests of one source may be applied to each source with substantially similar equipment processing substantially similar input material to an substantially similar output at an substantially similar rate. Within sixty days of the effective date of this order, ADM shall notify the Department in writing whether or not ADM intends to utilize this exemption, those sources which ADM also proposes qualify for the exemption, and, an explanation detailing the equipment, process layout, product, product handling and such other information necessary to justify the exemption.

9. ADM shall comply with permits identified in Tables 1, 2 and 3 which are attached to this order and are incorporated herein as a part of this order.

10. It is a deed that ADM has voluntarily undertaken these actions at the direction of the State of Iowa as represented by the Department and its predecessors, and that ADM intends to continue such voluntary cooperation with the Department for compliance with the terms of this Consent Order. The Department reserves the right to pursue any enforcement action which it deems necessary to fulfil its obligations under Iowa Code chapter 455B based on any additional information which may come to the

Department's attention subsequent to the entry of this Consent Order. ADM reserves the right to resist any such action. The Department and ADM expressly reserve all other rights and defenses that each may have.

#### VI. WAIVER OF APPEAL RIGHTS

This order is entered into knowingly and with the consent of ADM. For this reason, ADM waives its right to appeal this order. By entering into this order, Administrative Order No. 86-AQ-09 is withdrawn and the appeal of Order No 86-AQ-09 is moot.

#### VII. NONCOMPLIANCE

This order is binding upon ADM and is enforceable as an order of the Department in accordance with Iowa Code section 455B.146. Failure to comply may result in the imposition of administrative penalties or referral to the Attorney General to obtain injunctive relief and civil penalties. The Department acknowledges that ADM expressly reserves and retains the right to assert any and all available defenses including, but not limited to, impossibility, impracticability, and frustration, if the Department asserts ADM's noncompliance with the Order. The Department does not waive its right to contest the availability of any defense raised by ADM.

#### VIII. DENIAL OF LIABILITY

Nothing in this Consent Order nor any action taken by ADM hereunder shall be construed to constitute any admission by ADM including any legal or factual liability or responsibility in connection with any matter.

#### IX. FORCE MAJEURE

To the extent that ADM is unable to combust coal at an SO<sup>2</sup> emission limit of 2.00 in Boilers 1-5 as a result of Acts of God, war, insurrection, strikes, lock-outs or other labor difficulties, freight embargoes, poor river conditions, derailments, equipment failure or malfunction, unusually severe weather, floods, hurricanes, fires, explosions, safety hazards, or any other like causes beyond the reasonable control of ADM, then, during such period of force majeure, ADM may upon sound demonstration to the Department (or a designated third party competent to hear such matters) that combusting coal at an SO<sup>2</sup> emission limit of 3.00 will allow for the maintenance of the National Primary and Secondary Ambient Air Quality Standards, combust coal at such new limit in Boilers 1-5.



Any questions regarding this order may be directed to:

Mark Landa  
Legal Services  
Iowa Department of Natural Resources  
Henry A. Wallace Building  
900 East Grand Avenue  
Des Moines, IA 50319  
515/281-6243

Larry J. Wilson  
LARRY J. WILSON, DIRECTOR

July 5, 1990  
DATE

Scott A. Roberts  
FOR ARCHER-DANIELS MIDLAND CO.  
BY ONE OF ITS ATTORNEYS

6/26/90  
DATE

BEFORE THE IOWA DEPARTMENT OF NATURAL RESOURCES  
ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

Archer-Daniels Midland Co.

AMENDED CONSENT ORDER

NO: 90-AQ-10

Administrative Consent Order No. 90-AQ-10 is hereby amended as follows:

1. Table 2. Emission limits for monitored non-traditional SO<sub>2</sub> sources at ADM, Clinton.

Number	Description	Emission Limit (lb/hr)	Permit No.
52	No. 3 Leader Germ Dryer Rotoclone Exhaust	3.0	73-A-S181
53	No. 4 Leader Germ Dryer Rotoclone Exhaust	3.0	73-A-S181
58A	#1 Fluid Bed Germ Dryer	8.0	90-A-080
58B	#1 Stearn-Rogers	8.0	90-A-081

The remaining portions of Administrative Consent Order No. 90-AQ-10 remain in full force and effect.

  
LARRY J. WILSON, DIRECTOR  
IOWA DEPARTMENT OF NATURAL  
RESOURCES

3/25/91  
DATE

  
FOR ARCHER-DANIELS MIDLAND CO.  
BY ONE OF ITS ATTORNEY'S

3/5/91  
DATE